

established. As the forms involved in this process are apterous, the extent of dispersal of daughter colonies arising from such fissions of the old colony, is obviously limited.

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#### 24. PROXIMITY OF THE COLONIES OF THE TENDING ANT SPECIES AS A FACTOR DETERMINING THE OCCURRENCE OF APHIDS

*Aphis craccivora* Koch. is a common aphid and is found periodically infesting the tender newly sprouted shoots of the plant, *Glyricidia maculata* in Calicut, soon after the first rains. The area of observation reported below is a square compound on the Malabar Christian College campus and it is fringed on all sides with *G. maculata*. In this area, at present, the aphids are actively tended almost exclusively by the ant, *Anoplolepis longipes* Jerdon which nests in bare soil. It is known that in this kind of beneficial association or mutualism, the ants obtain honeydew from the aphids while the aphids are protected to some extent from their enemies by their attendant ants.

It was noted with interest that while the plants on two continuous sides of the compound were heavily infested with aphids, those on the other two sides were virtually free from them. This part of the compound was flooded with stagnant water during the rainy season making it impossible for *A. longipes* to nest in the soil. The plants along these two sides were not infested with aphids. In the remaining part of the compound where there is better drainage, the soil was more favourable to the ant and about fifteen nests were counted in the area.

